

## **PULSE THERAPY WITH ORUNGAL (ITRACONAZOLE) OF ONYCHOMYCOSIS**

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*Routine treatment of onychomycoses consists in single daily application of orungal (itraconazole) for 3-6 months. This study aims at assessing the effectiveness of orungal pulse therapy in onychomycoses of the hand. According to the new schedule, the drug is administered two times daily 2 capsules of 100 mg each for one week during three consecutive months. The effect of the pulse therapy in a female patient with onychomycosis of the hand after three months is excellent. The tolerability is good and there are no adverse effects at all.*

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**Key-words:** Onychomycoses, itraconazole, pulse therapy

The treatment of onychomycosis is rather difficult and quite a long process. The therapeutical schedules commonly used include the daily use of wide-spectrum antifungal preparations provided for several months. The patients treated in this way are monthly examined for unwanted side effects and for their biochemical data as well (4,5,9).

Orungal (itraconazole) is a triazole derivative which is extremely effective against fungal infections (7). The most significant mechanism of action is penetration in the nail by inserting into the nail matrix and diffusion through the nail bed (2,6,10). Itraconazole connects firmly with the nail keratin and after dispersing in the

tissue it does not liberate itself back to the plasma (8). It reaches quickly the place of infection and stays at its therapeutic levels for 6-8 months after the last pulse (1,3).

The purpose of this study is to assess the effectiveness of orungal (itraconazole) pulse therapy in onychomycosis of the hand.

### **MATERIAL AND METHODS**

A female patient was treated with orungal (itraconazole) for onychomycosis of the hand. The regimen consisted of itraconazole given as "pulses", each lasting one week with 3 weeks between the second and the third pulse. The dosage of itraconazole was of 200 mg twice per day (a total of 400 mg daily). The therapeutic start was supplied by mycological examinations – both microscopic and cultural (culture No 1241/31.V.1996). The caus-

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ative organism was *Trichophyton rubrum*.

Controls of the mycotic status were provided at the end of the third month as well as two years after the end of the pulse therapy. Routine biochemical blood analyses were monthly performed. No treatment with topical or other oral anti-fungal agents had been administered for the whole period.

## RESULTS AND DISCUSSION

The result of orungal (itraconazole) pulse therapy for onychomycosis of the hand was excellent. At the end of the third month a complete clinical and mycological healing of the nail was observed. The patient responded well to itraconazole. No clinical and laboratory adverse effects were established at all. The therapeutic effect remains stable and persists 2 years

after the end of pulse therapy.

The pulse therapy with orungal (itraconazole) for onychomycosis possesses several advantages over the well-known therapeutic schedules. Some of them are the following:

- 1) short duration (one week) in a dosage of 200 mg twice a day;
- 2) definite therapeutic result;
- 3) lack of clinical and paraclinical adverse reactions;
- 4) suitable schedules for use, and
- 5) no need for concomitant topical antimycotic therapy.

## CONCLUSION

A conclusion can be drawn that the pulse therapy with orungal (itraconazole) should be recommended as an effective, short lasting therapeutic schedule of choice for onychomycosis.

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## **Пулс-терапия с орунгал (итраконазол) на онихомикоза**

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**Резюме:** Стандартното лечение на онихомикозите се състои в еднократно дневно дозиране на орунгал (итраконазол) в продължение на 3 месеца. С това проучване се цели да се оцени ефективността на пулсовата терапия с орунгал при онихомикози на ръката. Съгласно новата схема, медикаментът се назначава два пъти дневно по две капсули по 100 mg за една седмица в продължение на 3 последователни месеца. След 3 месеца ефектът от пулсовата терапия при болна с онихомикоза на ръката е отличен. Поносимостта е добра и няма никакви странични ефекти.